Virginia Hospitals for a Healthy Environment

Pledging to Eliminate Mercury in your Healthcare Facility

Background

Mercury is a neurotoxic, heavy metal that is linked to numerous health effects in wildlife and people. It is ranked near the top of the U.S. Environmental Protection Agency's list of "Priority Chemicals/Metals" that are of greatest detriment to the environment. In a traditional hospital setting, mercury is present in many uses ranging from thermometers, sphygmomanometers, dilation and feeding tubes, to batteries, fluorescent lamps, thermostats and switches, and even vaccines and other drugs.

Because they contain mercury, these items must be handled as hazardous (RCRA) wastes when they are disposed of. Mercury and mercury-containing equipment should never be disposed of as regulated medical waste (RMW). However, because of improper segregation, waste containing mercury is often commingled with infectious waste. It isreleased into the environment through medical waste treatment technologies such as incineration. In fact, because of these practices, the EPA notes the healthcare sector as the fourth largest contributor of mercury air emissions to the environment.

Disposing of mercury and mercury-containing items as hazarous waste is not the best solution. Work with your waste handler to arrange for segregation and recycling of these items. In many cases, the cost of recycling the mercury (under Universal Waste rules) is much less than disposal as a hazardous waste, and the handling restrictions will be fewer.

Hidden Costs

Mercury has a number of hidden costs not always accounted for in an average cost-benefit analysis. Beyond the cost of actually procuring the mercury-containing device, staff must be trained on how to properly clean up a spill, and spill kits must be purchased.
Spills often result in significant costs--in the form of lost revenue from closed patient areas, as well as the actual disposal as hazardous waste of materials contaminated with
mercury. Eliminating mercury in your facility can eliminate all of these hidden costs. There are safe and effective alternatives for virtually every mercury-containing product in the healthcare sector.

TASK 1: Work with your Purchasing/ Materials Management Department to identify which products in your facility contain mercury.

The basic concept is to develop an inventory of the types of mercury-containing equipment that your facility is using and purchasing. Once you have this list in hand, your facility can begin to ask the question, "Are there alternative products that are equally effective that do not contain mercury?"

Several easily accessible resources to identify mercury-containing products are:

1. Going Green: List of Items Containing Mercury in the Hospital Setting
http://www.noharm.org/library/docs/Going_Green_List_of_Mercury-Containing_Items_i.pdf

2. The National Institute of Health's Mad as a Hatter website lists common products, processes and equipment in the hospital setting that typically contain or use mercury.
http://www.nih.gov/od/ors/ds/nomercury/alternatives.htm

3. Mercury Assessment Worksheet
The Mercury Assessment Worksheet will help organizations inventory their mercury-containing devices and calculate the amount of mercury those devices contain. This spreadsheet was developed in partnership with the CA Office of P2 and Technology Development and the CA Department of Health Services' Hospital P2 Program.
http://www.h2e-online.org/pubs/mercalc.xls

4. H2E Self Assessment Guide
A tool to help facilities conduct self-surveys to help prioritize activities and develop action plans. See Sections 5A and 5B on mercury assessment.
http://www.h2e-online.org/pubs/selfasmt.pdf

TASK 2: Close the Loop: Implement a Mercury-Free Purchasing Policy

It is very useful to have hospital or system-wide policies in place to eliminate certain toxic products or materials, so that administrators, clinicians and materials managers are all working under the same definition of what should no longer be purchased by the facility. By developing a Purchasing Policy, it will become part of your purchasing department's job to consider alternatives to mercury-containing devices.

Sample Purchasing Questions:
1. Is this product type on our list of mercury-containing products?.
2. Have you considered a non-mercury alternative to this product?
3. Why/Why Not? Price? Reliability? Other?

A policy does not necessarily have to state that no items containing mercury may be purchased under any circumstances, but rather, that mercury-free products will be considered for all product categories and given preference if proven effective and cost-competitive.

A sample Mercury-Free Purchasing Policy can be found in Attachment 1.

Looking Forward: Setting Goals for Elimination

Once you have developed a baseline list of mercury-containing items and established a mercury-free policy, your facility should think about setting goals for mercury elimination. Goals should be based on facility priorities. For example, if your facility has received a citation for mercury in water, prioritizing the transition away from mercury-containing fixatives in your labs may make the most sense. The low hanging fruit includes thermometers, sphygmomanometers and clinical devices such as esophageal dilators and bougies. By setting specific goals, your facility can better track its progress toward mercury elimination.

The Goal of Zero

Transitioning away from certain products is often not a decision that materials managers or environmental services can make alone. Often a Product Evaluation or Standards Committee is responsible for making decisions about which products are purchased. It will be important to work with this committee to address clinician preferences and concerns as the transition is made from mercury to non-mercury. Through the committee and through overall staff training, the goal of **"mercury-free"** should be communicated as a priority.

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